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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,961	08/31/2001	Seung-Cheol Hong	P54428RE	7701
7590	03/25/2008	Robert E Bushnell and Law Firm 1522 K Street NW Suite 300 Washington, DC 20005-1202	EXAMINER MYERS, PAUL R	
ART UNIT	PAPER NUMBER		2111	
MAIL DATE	DELIVERY MODE		03/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/942,961	Applicant(s) HONG ET AL.
	Examiner Paul R. Myers	Art Unit 2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

1) Responsive to communication(s) filed on 10 March 2008.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-4 and 7-60 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 5 and 6 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 31 August 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1448)
 Paper No(s)/Mail Date 9/19/06 and 12/27/04

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-60 have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

2. The IDS's filed 12/27/04 and 9/19/06 had references cited without a date. The examiner has dated these references accordance to date information provided in the references. Generally the printing date.

Drawings

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-4, 7-15, 17-29, 31-41, 43-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants admitted prior art herein after AAPA in view of Kikinis PN 5,389,952.

In regards to claims 1, 7, 9, 10, 14, 21, 23-25, 27-28, 31, 35, 38, 43, 46, 49, 51, 53, 55-56: AAPA teaches an apparatus for providing power to a display monitor, said apparatus comprising: a power supply unit (10) for converting an AC input voltage (AC) to a DC output voltage; a voltage regulator for producing a constant output voltage supplied to the monitor (20); a transformer for producing necessary operating voltages for each part of the monitor (30), in which the output voltage of the voltage regulator being supplied to a primary of the transformer; a feedback circuit for detecting current variation at the output of the transformer (40) and for supplying the detected variation value to the voltage regulator; a signal input port connected to a video output of a computer (50); a microcomputer operated in response to a video signal received at a video input port of the monitor (60) and a corresponding control mode indicating signal (MS); and a signal amplifier for amplifying and processing a video input signal supplied to a signal input of the color display tube (80). AAPA does not teach a switching circuit provided in a heater power supply line between one output of the transformer and a heater of a color display tube of the monitor for switching off the heater power supply line when the monitor

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enters a power-off mode; and the microcomputer operated in response to a video signal received at a video input port of the monitor to produce a power control signal. Kikinis teaches a microcomputer (339) operated in response to a video signal (127 specifically the HSNC and VSYNC of the video) received at a video input port (333) of the monitor (347) to produce a power control signal (341) to switch off power to the heater (Column 5 lines 3-45) Specifically level 1 “cuts off power to all circuits in the monitor 347 except microcontroller 339, interface 333, and video circuit 345” while level 2 “cuts off power to all circuits except those described above plus the CRT cathode heater” Thus level 1 signal cuts off power to the heater (inherently done by a switch). All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. It would have also been obvious to perform control via software.

In regards to claim 3: Kikinis teaches the microcomputer generating a continuous active level signal as the power control signal when the monitor enters the power-off mode. Kikinis does not state if this “active level” is positive (high) or negative (low) logic. Official notice is taken that both positive and negative logic are known. The claim would have been obvious because “a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.” KSR.

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In regards to claim 4: AAPA teaches a mode signal (MS) to a mode indicator (70). AAPA is silent upon the form of the mode signal. Flashing lights are known. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

In regards to claim 8: Kikinis teaches the video including red green and blue (R,G,B).

In regards to claims 11, 17: Kikinis teaches interrupting power to the heater independently of other applications (the microcontroller, interface and video circuit).

In regards to claims 12, 18, 20, 22, 26, 32, 34, 37, 39-41, 44-45, 47-48, 52, 54, 57-58: Kikinis teaches interruption of the video sync signals controls the power mode selection.

In regards to claims 13, 15, 19, 29, 33, 36, 50, 59: AAPA teaches a mode indication. AAPA teaches that it is well known and expected in the art to include a mode indicator including LEDs for indicating a power mode (Fig. 1; col. 2, lines 4-14; col. 4, lines 47-60).

6. Claims 2, 16, 30, 42, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Kikinis PN 5,389,952 as applied to claim 1 above, and further in view of Heidt PN 3,703,679.

In regards to claims 2, 16, 30, 42, 60: Kikinis teaches switching off power to the heater. Kikinis is silent upon the structure of the power switch. Heidt teaches a current

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regulated power cutoff switch comprising: a first transistor (28) for switching on or off the power supply line between the input 20 and the output (24) in response to a base bias current supplied from said output of the transformer (via resistor 34); a second transistor (32) for selectively switching a base bias current path of the first transistor to ground (via resistor 36); and a third transistor (42 or alternatively 46) for selectively switching a operating voltage supply line to a base bias resistor (50 in conjunction with 49) of the second transistor (32) to ground (via 56) in response to the level of the power control signal supplied (60). All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Allowable Subject Matter

7. Claims 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

PN 4980836 and PN 5697717 are cited that teach power indicators using LED's. The examiner was unable to find the exact control structure described in claims 5 and 6.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul R. Myers whose telephone number is 571 272 3639. The examiner can normally be reached on Mon-Thur 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (571) 272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul R. Myers
Primary Examiner
Art Unit 2111

/Paul R. Myers/
Primary Examiner, Art Unit 2111